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ABSTRACT

This publication consists of two articles: "Evaluation in Bilingual Education," by James Burry, and "Desegregation and the Rights of Hispanic Students: The Los Angeles Case," by M. Beatriz Arias. In his paper, Burry used three methods for identifying bilingual evaluation needs. First he reviews Federal/State requirements for bilingual program evaluation. Second he reviews bilingual evaluation literature and describes needs in testing and design. Third, he uses an administrator survey to describe needs in planning/management, evaluation designs, test selection/development, and information utilization. Arias discusses the rights of Hispanic students as seen in the Los Angeles desegregation litigation: Crawford vs. Board of Education of the City of Los Angeles in 1963; the 1970 Los Angeles Superior Court determination that Los Angeles Unified School District was substantially segregated; and the 1976 California Supreme Court Affirmation of the lower court's findings. Arias then discusses four possible areas of conflict between the linguistic needs of Hispanic students and the development of a desegregation plan: maintaining a "critical mass" of students of limited-English speaking ability; the availability of qualified bilingual teachers; curriculum planning and coordination; and English-speaking student participation in bilingual education programs. (Author/BE)

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IN THIS ISSUE:

Writing on evaluation needs in bilingual education:
James Burry — Director of Field Services, Center for the Study of Evaluation, University of California, Los Angeles

Writing on desegregation and the rights of Hispanic students:
M. Beatriz Arias — Assistant Professor, Graduate School of Education, University of California, Los Angeles

BURRY describes the methods employed by CSE to identify bilingual evaluation needs: a review of federal/state requirements for bilingual program evaluation; a review of bilingual evaluation literature; and a bilingual program administrator survey. The legislative section discusses evaluation requirements and those implementation features on which bilingual programs vary. The literature section describes needs in testing and design. The survey section describes major areas of need identified (and substantiated in the two preceding sections): evaluation planning/management; development of evaluation designs; test selection/development; and utilization of evaluation information. The article offers some broad suggestions for improvement.

ARIAS discusses the rights of Hispanic students as seen in the Los Angeles desegregation litigation: Crawford vs. Board of Education of the City of Los Angeles in 1963; the 1970 Los Angeles Superior Court determination that Los Angeles Unified School District was substantially segregated; and the 1976 California Supreme Court Affirmation of the lower court's findings. Arias then discusses and makes recommendations in four possible areas of conflict between the linguistic needs of Hispanic students and the development of a desegregation plan: maintaining a "critical mass" of students of limited-English speaking ability; the availability of qualified bilingual teachers; curriculum planning and coordination; and English-speaking student participation in bilingual education programs.

Evaluation in Bilingual Education

By James Burry

Introduction

Since the passage of the Bilingual Education Act of 1968, state legislatures, the courts, and various educational agencies and community groups have increasingly supported bilingual education. The support, however, has varied in focus and intensity, and there is still no clear national policy toward bilingual education.

Debate regarding the merit, philosophy, and goals of bilingual education, and the population to be served reflects many perspectives. Skeptics question the need for bilingual education and claim that the effectiveness of bilingual programs has not been demonstrated. Others charge that evaluations of bilingual education programs have not adequately met the information needs of a new and complicated program. Still others feel that the last eleven years have been capacity building, that human and material resources for program implementation have been inadequate, and that instruments and technology appropriate to evaluation have been virtually non-existent.

Lack of information about the implementation and effect of bilingual programs is one factor which has hampered the development of a comprehensive policy. Few evaluations have attempted to assess program impact; those attempting to make such assessments have been criticized for failing to consider the issues and problems peculiar to the education of limited- and non-English-speaking (LES/NES) students. Further, the great variation in the design and reporting of bilingual program evaluations has severely limited their use as models or as sources of knowledge regarding the implementation and effect of bilingual programs.

The Center for the Study of Evaluation (CSE) has been exploring these issues in bilingual education. Under contract with the National Institute of Education, CSE has attempted to identify the most pressing evaluation needs of bilingual programs and is developing strategies to address these areas of need.

It is important to note here that we are discussing issues and needs in *evaluation* as opposed to *research*. The distinction between evaluation and research is an important one. It goes far beyond questions of topic or technique; rather the distinction involves fundamental differences in how information is generated, the kinds of information generated, and the intended uses of the information. Cronbach and Suppes (1969), in their discussion of modes of inquiry cite the need to

> . . . distinguish *decision-oriented* from *conclusion-oriented* investigations. In a decision-oriented study the investigator is asked to provide information wanted by a decision-maker: a school administrator, a governmental policymaker, the manager of a project . . . or the like. The decision-oriented study is a commissioned study. The

Center for the Study of Evaluation
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Each issue of **Evaluation Comment** will discuss topics in educational evaluation by presenting articles on evaluation theory, procedures, methodologies, or practices. For each issue of **Comment**, CSE will request contributions on a specific topic in evaluation from recognized experts in the field; unsolicited manuscripts will not be accepted.

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decision-maker believes that he needs information to guide his actions and he poses the question to the investigator. The conclusion-oriented study, on the other hand, takes its direction from the investigator's commitments and hunches. The educational decision-maker can, at most, arouse the investigator's interest in a problem. The latter formulates his own question, usually a general one rather than a question about a particular institution. The aim is to conceptualize and understand the chosen phenomenon; a particular finding is only a means to that end. (pp. 20-21)

In this article we categorize evaluation as decision-oriented study and research as conclusion-oriented study. Evaluation differs from research intended to produce results of general significance; evaluation, with its decision orientation, is intended to provide results that are relevant for a particular institution at a specific point in time. It differs from conclusion-oriented research not so much in matters of topic of interest or techniques employed, but rather in the reasons for conducting the work, the constraints imposed by the institutional setting in which the work is conducted, and the intended use of the information generated. Thus evaluation should generate information that will lead to decisions about educational questions and problems within a particular setting.

CSE has used three sources of information to identify evaluation needs in bilingual education and their appropriate response strategies: (1) a review of federal and state legislative requirements for the design and evaluation of bilingual projects; (2) a review of the literature in bilingual program evaluation; and (3) a survey of bilingual project administrators dealing with evaluation practice and training needs. This article describes the major findings of the three-part study, discusses some of the work being done at the UCLA Graduate School of Education in response to needs in the field, and provides a few suggestions to potential evaluators of bilingual education programs for increasing the effectiveness of their evaluations.

Federal and State Bilingual Education Legislation

Before a program can be evaluated, its critical components must be identified. That the critical components of bilingual programs may vary greatly from setting to setting is seen in the diverse federal and state legislation concerning the establishment and conduct of bilingual education. CSE's review of the legislation[1] identifies those bilingual program characteristics mandated by law which are of particular importance to program evaluators.

The review is organized in terms of program implementation and program evaluation. Issues of program implementation consist of the following:

- type of program — transitional or maintenance
- population to be served
- participation of English-speaking students
- census — determining numbers of students eligible for the program and when a program must be provided
- description of the program

[1]This article contains a summary of the legislative review conducted by CSE. The report from which this summary was taken is titled *Characteristics of Bilingual Programs Under Federal and State Legislative Policy: Implications for Program Development and Evaluation* by Ruddie Irizarry, and can be obtained from the National Dissemination and Assessment Center — ESEA, Title VII, California State University, Los Angeles, School of Education, 5151 State University Drive, Los Angeles, CA 90032.

- grades to be covered and length of time students remain in the program
- student-teacher ratio
- teacher/staff requirements and qualifications
- staff training
- materials requirements
- community participation

Issues relevant to program evaluation include requirements for:

- state or local needs assessment
- student assessment
- program evaluation
- reporting

All of the state laws are intended to provide an equal educational opportunity to the populations they serve, and to foster the development of English language skills. However, they differ in many critical areas, as the following discussion will demonstrate.

Characteristics of Program Implementation[2]

Type of Program: A principal issue in bilingual education concerns program goals and philosophies. While there is little controversy about the expected *English* language growth of students, there is still a great deal of debate about the goals for *native language* outcomes. Programs may be transitional, advocating a shift to instruction in English as soon as the student can perform successfully in English, or maintenance, advocating the development and maintenance of language skills in both English and the native language.

Federal legislation provides for transitional bilingual programs. Instruction in and study of the native language of the children of limited-English-speaking ability is to occur "to the extent necessary to allow a child to progress effectively through the educational system." All of the states which have legislation establishing bilingual education have provisions for transitional programs. But four states allow maintenance programs *and* transitional programs, and one of those states mandates programs at the elementary level serving certain numbers of non- or limited-English-speaking students, which will develop and maintain the basic language skills in both languages, or will enable the pupil to achieve competency in both languages.

The curriculum developed for a maintenance program may differ substantially from that intended for a transitional one. For example, some programs for limited-English-speaking students may stress the development of reading skills in the primary language during a student's early participation in the program, with the English curriculum emphasizing oral language development. Instruction in English reading may be introduced when the child has achieved a certain level of oral English and/or reading proficiency in the primary language. Other programs may emphasize the development of reading skills in English as soon as possible.

Although maintenance and transitional programs may have the same ultimate goal for English language achievement, the rate of growth and the stage in the educational process at which the growth takes place may differ. For example, one might expect that English language performance of a student participating in a program emphasizing primary language development would be low during the student's early participation in the program. A similar student in a program emphasizing only English language development may demonstrate higher performance in English earlier in the program.

Population to be Served: Another major issue is the determination of who is to be served by a bilingual program. The legislatures and the courts have established only general guides which permit differing interpretation and prevent development of widely applicable criteria. Lack of good assessment instruments has further prevented the development of a widely usable system for determining which students should receive bilingual instruction.

There is little question that non-English-speaking students are to be served by bilingual programs. But with respect to students who speak English, given the wide range of English language ability possible, the question of program eligibility is more difficult to resolve. (The recent definition of limited-English-proficiency — LEP — and the need to establish criteria for identification of LEP students and their entry into and exit from the program suggest that the oral proficiency of these students in English must be assessed. Further, their academic progress must also be assessed, because the current definition of a bilingual program requires using the native language of the LEP students to allow them to achieve competence in English and to progress effectively through the educational system.)

Different states deal with this issue in different ways. In some states, in addition to linguistic and/or cultural factors, general academic performance is taken into account when identifying the population to be served. Here the most frequently applied criterion is that the student is unable to profit from regular classroom instruction. Implicitly, measures of achievement or classroom performance in the English curriculum are to be used to determine program eligibility. However, these measures are not to be applied in isolation; they are linked with linguistic and/or cultural characteristics. Generally, for students having difficulty in the English language curriculum to be considered eligible for bilingual instruction, they must also have a native language other than English and/or come from a home environment where a language other than English is used.

Language proficiency or language dominance are terms which are frequently employed, and the distinction between the two is important. Language proficiency refers to an individual's competence in one language irrespective of performance in the other language. A judgment of proficiency calls for a consideration of oral and aural competence as well as grammar, syntax, and vocabulary. Language dominance, on the other hand, is a term of dual language classification and considers the student's fluency in each language. The student is generally reported to be stronger in one language than the other, or equal in both; such information might not report on the student's full competence in either. Judgments of language dominance are often restricted to the student's aural and oral abilities in the two languages under consideration.

[2]At the time CSE conducted the review of bilingual legislation (1978), in addition to the federal legislation, some 20 states had adopted legislation concerning bilingual education. Other states were in the process of proposing such legislation, and the federal legislation was even then under revision. Our review of the legislation, therefore, does not reflect changes occurring since then. Further, the information contained in this article represents our interpretations of the legislative intention as reflected in the documents from which we worked. For these reasons, we have neither cited nor named particular states in this article, but instead have provided examples of differences among states. These examples represent the differences which abound in bilingual education legislation (and programs) from one state to another and within states. With the knowledge that legislation does vary from state to state and may be subject to differing interpretation, the forewarned bilingual program evaluator should read and interpret the relevant legislation, find out if that interpretation is shared by the unit being evaluated, reconcile any differences, and plan the evaluation accordingly.

Approximately one-third of the states with bilingual legislation require consideration of students' comprehension and speaking ability in English; fewer require the assessment of students' reading and writing abilities. Yet all of these skills may affect a student's ability to benefit from instruction in English only, and are therefore important in considering program eligibility and, in the case of transitional programs, determining when the student may be ready to exit from the program.

Legislation sometimes refers to the students' ability in their native language, especially speaking and understanding. Achievement or ability to benefit from instruction in the native language are not discussed as criteria for selection, however.

English language ability is the focal point in selecting students to participate in bilingual programs. But even in this regard, selection criteria vary substantially among the states. One state, for example, stipulates that a student is eligible for the program if "the student speaks (English) without apparent difficulty but displays low achievement indicating some language or cultural interference with learning." Another state allows those students to participate "who speak English exclusively but whose manner of speaking reflects the grammatical structure of another language" if these students have an overall achievement which is at or below "minus one standard deviation on a normed test; or one year below grade level as measured by the district's ongoing student achievement testing program." Most states, however, are less specific in their provisions; for example, one definition of limited-English-speaking students is "those children whose primary language is other than English and who have difficulty performing ordinary classwork in English."

Participation of English-Speaking Students: A majority of the states with bilingual legislation allow the voluntary participation of English-speaking students, though priority is generally given to students who are limited-English-speaking. Seven states neither prohibit nor provide for the participation of English-speaking students. One state stipulates that "students who speak primarily English are not eligible to participate...;" another permits their participation "unless (it) will hinder the progress of the non-English dominant students."

Only one state sets a specific minimum number of English-speaking students, and requires that "not more than two-thirds of the pupils enrolled shall be limited-English-speaking pupils." A few states stipulate that the majority of the students shall be limited-English-speaking; however, one of these states will not reimburse districts for the education of English-speaking students, and another allows their participation "to the extent that it is economically feasible."

The legislation seldom cites the educational treatment of English-speaking students in a bilingual program. The federal legislation, and that of one state, provide that English-speaking students may participate "in order that they may acquire an understanding of the cultural heritage of the children of limited-English-speaking ability." Another state encourages its districts to teach the language(s) of the minority children to the monolingual speakers of English to promote a pluralistic concept of America; yet another state provides for programs "to afford all school children in the state the opportunity of attaining proficiency in a second language."

Census: Fourteen states require a census to determine the numbers of students in need of bilingual instruction. Some states require reporting by district and others by school. Generally, the assessment is applicable at all grade levels; but one state requires only the reporting of students in kindergarten through third grade.

The states differ in their census provisions. One state, for example, requires that students be classified according to the categories established by the Lau Remedies[3]; another requires that students be reported by race and national origin; another provides for the reporting of the achievement level of students identified as limited-English-speaking; still another provides for the assessment and reporting of the English language proficiency of limited-English-speaking students. Other states are less specific, requiring only the reporting of the numbers of children of limited-English-speaking ability.

The census results can be used for several purposes, but they are generally used to determine *when* bilingual programs must be instituted and *what type of program* will be required. They are also used to allocate financial resources on the basis of need.

Twelve of the states with bilingual education legislation specifically mandate bilingual programs. The numbers of eligible students in the school system is the main issue in mandating a program, but the necessary numbers and the levels at which these numbers are reported vary. For example, one state requires the establishment of a bilingual program if a *school district* has an "enrollment of 20 or more children of limited-English-speaking ability in a language classification in grades K-12." Another state mandates a program of bilingual education when there are in any public *school* within a local or regional school district 20 or more eligible children classified as dominant in any one language other than English." Still another state requires that a district "develop a plan for a bilingual and bicultural education program in a school having 50 or more students in grades kindergarten through third with linguistically different skills...;" and one state mandates a certain type of program when the "census indicates that any school of a school district has 10 or more non-English-speaking pupils or 15 or more limited-English-speaking pupils with the same primary language in the same grade level, or in the same age group, in a multigrade or ungraded instructional environment..."

Description of the Program: The major provisions in the legislation concerning kinds of programs to be instituted pertain to language use and language outcomes. All of the programs permitted or mandated are intended to develop full competence in English. As mentioned previously, some also provide for the development of competence in the language other than English. The majority of the laws provide for the use of two languages in instruction. All provide for instruction of English, while some provide for instruction of the languages other than English. The numbers and linguistic abilities of students served are important considerations in determining the type of program to be instituted; and there are variations *within* one or two states as to what type of program a district must provide depending on the enrollment and linguistic variation of students in need of the program. The major types of programs with respect to language use and outcomes are:

- Programs of instruction in which all required courses are taught in the language of the students of limited-English-speaking ability and in English, and in which instruction is given in the comprehension, speaking, reading, and writing of the non-English language and of English. The principal goals of these programs can be the development and maintenance of both languages, or the develop-

[3]In the summer of 1975, the Department of Health, Education, and Welfare issued recommendations for meeting the requirements of the Lau vs. Nichols Supreme Court Decision of 1974. See Lau Task Force Remedies, Title VI (CRA 1964 Regulations), Department of Health, Education, and Welfare, Office of Civil Rights: Washington, D.C. 1975.

ment of both languages until the student has achieved a level of English language ability which will allow him/her to perform at an adequate level in a classroom where instruction is conducted solely in English.

- Programs of instruction in which courses are taught in the language of the students of limited-English-speaking ability, for all or a part of the curriculum, and in English; and in which instruction is given in the comprehension, speaking, reading, and writing of English. The major goal of these programs is the development of the student's English language ability through the use of both languages until the student is able to perform at an adequate level in a program where instruction is conducted solely in English.
- Programs where instruction is conducted in English with special English language instruction for students of limited-English-speaking ability. These may include English as a Second Language programs or High Intensity Language Training programs. The major goal of these programs is the development of the students' English language skills as soon as possible in order to facilitate their transition into the regular school program.
- Programs in which English-speaking students receive instruction in the language of the students of limited-English-speaking ability. These programs may concentrate on the development of oral skills in the non-English language, at least at the lower grade levels. Instruction in other subjects is conducted primarily in English. The major goal of these programs is to teach another language to English-speaking students.

In addition to considerations of language, there is also legislation calling for instruction in the culture of the students of limited-English-speaking ability. The majority of the states stipulate that instruction be provided in the history and culture associated with the native language of the students of limited-English-speaking ability, and in the history and culture of the United States. Others provide that instruction be given in the cultural heritage of the students. Some states have additional specifications; for example, that programs utilize the cultural and linguistic background of the students in the curriculum, and that they teach the students to appreciate the value of different languages and cultures. One state provides for the teaching of the cultural heritage of the students and the contribution made by that cultural group to the community, state, and country. It further encourages districts to teach the language of the minority to monolingual speakers of English in order to promote a pluralistic concept of America.

Grades to be Covered and Length of Time Students Remain in the Program: The majority of states which have adopted bilingual legislation do not limit the grades that may be served by the programs, nor do they restrict the length of time students may remain in the program. Some states permit students to remain in the program until they can perform "ordinary" classwork in English. In other states with transitional programs, such a stipulation may be assumed if not specifically stated.

But some states do limit funding to certain grades, and some limit the time for program participation. One state stipulates that children may remain in a mandatory bilingual program for a period of six years. Another state limits a student's participation to four years. A few states limit a student's participation to a period of three years, with the provision that students may be transferred from the program prior to the third year if they achieve a level of English language skills which will enable them to perform successfully in classes given only in English. Two of these states have provisions for individual students to remain for a period longer than three years with appropriate approvals.

Student/Teacher Ratio: Seven of the laws have established a maximum student/teacher ratio. Six stipulate that the state or federal education agency set the maximum ratio; one state provides for that ratio in the law.

There are substantial differences in the established ratios. For example, one set of regulations stipulates that the maximum student/teacher ratio in bilingual classrooms will not be higher than the overall ratio for the district; another state stipulates that the maximum ratio shall not exceed 32:1. Other states permit the ratio to vary depending on whether a teacher is assisted by an aide.

Teacher/Staff Requirements and Qualifications: The majority of states provide some minimum standards for teachers, and in some instances for other staff participating in the program. In addition, thirteen states have adopted certification requirements for teachers of bilingual education programs. One state, which has not adopted legislation establishing bilingual education, requires the possession of bilingual certificates for bilingual education teachers.

The laws generally require that teachers in bilingual programs be regularly certificated, and that they possess a specified level of education. Most states further require that teachers have competence in both English and the language of the children of limited-English-speaking ability served by the program. Five states specifically provide for knowledge of the cultural background of the students being served. Three of these states stipulate that teachers should share the culture of the students, but one of these states provides that the determination of the cultural background of the teachers shall not be based solely on ethnic origins.

Training or experience in bilingual education is a frequent requirement, especially knowledge of bilingual education methodologies. The federal legislation refers to ability and experience in activities to develop listening, speaking, reading, writing, and other academic skills in English and the dominant language of the students. One state includes the ability to teach the history and culture of the United States and the native land of the students served. Where teachers with the established qualifications are not available, exemptions are frequently permitted. However, it is expected that temporary staff will gain the competencies required or will be replaced by teachers with the requisite qualifications.

Provisions are sometimes made for other program staff. These include teachers' aides, community coordinators, bilingual counselors, project directors, or bilingual supervisors.

Staff Training: The lack of adequately prepared staff has been one of the greatest obstacles encountered in establishing bilingual education programs. In response to this situation most states have made provisions for training program staff in bilingual education competencies. These provisions include cooperation with institutions of higher education, participation in short-term institutes or conferences for project staff, pre-service and in-service training workshops, and opportunities to observe demonstrations in the classroom and gain experience by working with experienced project staff.

The laws are usually general with respect to content of the training. Some states mandate certain content in the training, but stipulate that it is not to be limited to those subjects. Among the areas recommended or mandated in the training process are: training for bilingual teachers in the non-English language; training for monolingual English teachers in the language of the children of limited-English-speaking ability; development of bilingual instructional skills; development of cultural familiarity and understanding of the heritage of the children of limited-English-speaking ability; development of knowledge of bilingual education and its philosophy; and development and use of instructional and testing materials.

Materials Requirements: The laws for the most part are silent or general in their provisions concerning materials for use in bilingual programs. Eleven states make no specific stipulation of materials, and of the rest, the majority merely provide for their acquisition and development.

Federal legislation focuses on the development and dissemination of materials suitable for bilingual programs. To this end federal provisions have been made for materials development centers, dissemination and assessment centers, and a clearinghouse for bilingual education. Similarly, one state has made provisions for the development of resource centers. A number of states have made the state departments of education responsible for the review and evaluation of materials.

Community Participation: The majority of the laws call for community participation in bilingual programs. There are considerable differences among the state provisions, but they generally provide for the organization through which the community will participate, the means of selecting the community members, the composition of the community group, and their role in the program.

Generally, the legislation provides that committees be established through which the community will participate in the program. Some committees are to be established at the district level, others at the school level, and in some cases a combination of district and school level committees are required. Two states do not mandate the establishment of committees, but stipulate that parents should be involved in the program. Some states require that the committee members be elected while others provide that they be appointed by the principal. Most of the laws provide for a majority of the committee members to be parents of children participating in the program.

The level of specificity with which state laws define the nature of community involvement varies considerably. Generally, the community committees are intended to participate in the planning, implementation, and evaluation of the program. In some cases the community committees must approve the program plan prior to its submittal. Other community committee activities mentioned are selecting the schools to participate in the program, establishing program goals and objectives, selecting the program personnel, assisting in the district needs assessment, participating in the language assessment process, and disseminating information about the program.

Program Evaluation

Considerable attention has been given in the legislation and the regulations to assessment and reporting requirements for bilingual programs. These requirements include information on needs assessment, program implementation, and program effect. There are substantial differences in the type of information requested, with some states making general provisions for information reporting, and others calling for the provision of very specific information. The development of an adequate evaluation design is frequently a prerequisite for funding.

Needs Assessment: Information establishing the need for bilingual education is a common provision. Needs assessments generally include information on the numbers of students who meet the requirements for program eligibility and the numbers of these students to be served by the proposed programs. Two states require additional information: one stipulates that the state department of education will provide information on student dropout, retention, special education placement, and achievement; the other requires information on age, language, race, national origin, and family income of students of limited-English-speaking ability and their concentrations in schools. This latter state, in addition, requires information on the placement rate of those limited-English-speaking students who are in classes for the handicapped, as well as their achievement scores, mobility rates, and dropout rates in comparison with average district figures.

Student Assessment: Perhaps the most difficult area, and that in which there is the greatest difference in the legislative mandates, is student assessment. Students must be assessed to establish their eligibility for the program and their progress in the program. States allow for varying approaches in the selection of instruments. In some states the local school district is permitted to select or develop its own instruments; in others, the district must present the rationale for selecting a particular instrument. Sometimes local officials may select an instrument only from a pool of state-approved instruments, and in others the school districts *must* use state-mandated instruments.

The assessment of students to determine program eligibility depends on the state's definition of students to be served. For example, eligibility may be based on home language use; language dominance or language proficiency; oral language only, or reading and writing ability as well; and/or student achievement, including the use of norms.

Substantial differences exist in how students may be identified. Some laws are general in their requirements. For example, the federal legislation only requires that school districts describe how and when students were assessed to determine limited-English-speaking ability. Local education agencies must provide a description of the assessment instrument, a rationale for its selection, and the procedures to be followed in its use. One state requires that instruments be normed for the geographic area, and that they be valid for identifying students with linguistically different skills; another stipulates that the instruments must be selected and administered so as to avoid racial or cultural discrimination.

Some states are more specific in their assessment provisions. One state requires the assessment of English language proficiency with instruments approved by the state. Another requires the assessment of oral comprehension, speaking, reading, and writing of English. Yet another recommends using objective measures of English language proficiency and comparing the child's language with that of a typical English-speaking student of the same age; this state also permits subjective measures such as teacher opinion, peer interaction, and parent information. In addition to information on language proficiency, another state provides for the use of information such as reading and arithmetic skill levels and other course grades of limited-English-speaking students in relation to their classmates; this information may indicate a lack of progress due to limited-English-speaking skills. One other state requires the use of a parent questionnaire to identify students who speak a language other than English, and then a language assessment instrument to be administered to students identified in the parent questionnaire. In addition, achievement information is to be provided for students who are fully bilingual or who reflect the grammatical structure of another language in their use of English.

Once students have been selected for the program, they must be assessed to determine program effectiveness, and in some instances to determine when students are ready to enter into the regular school curriculum. Most states require an annual assessment of students. Federal legislation and the legislation in one state require pre- and posttesting. The areas to be assessed include basic skills, listening comprehension, speaking, reading, and writing of English, and proficiency in the other language to the extent that instruments are available. The federal regulations require evaluations to determine whether the scholastic achievement of students

in bilingual programs is equal to or better than it would have been had students remained in a regular, unilingual program of instruction. Where a program chooses to base this comparison on the performance of non-participating but similar children, it must provide a description of the methods used to identify such non-participating children. The federal regulations also require the use of appropriate scores and tests of statistical significance in reporting the results for all participating children and the comparison group, should one be used.

Program Evaluation: Besides student assessment, general provisions are made in the legislation for program evaluation. A few states provide for reporting the extent to which the program objectives were achieved. One state provides for the conduct of a comprehensive evaluation to include the assessment of pupil achievement, educational processes, and program results, as well as the attitudes of the people involved in and affected by the programs. Another provides for an evaluation plan to include process and product evaluation, management, parental and community involvement, staff development, and materials development, acquisition and use. Yet another state includes the reporting of per pupil costs of the program; and another requires the certification that funds have been used for the specified purposes. One state provides that, in addition to an evaluation of pupil progress, programs will identify variables which may have affected student academic achievement, including other programs.

Provisions are also made for the collection and dissemination of information by the state education agencies. These may include information on the theory and practice of bilingual education, on exemplary or innovative pre- and in-service training programs, and on the adequacy of tests and testing mechanisms. This information is to be disseminated to school districts to aid in the operation of the local programs.

Reporting Requirements: Provisions are made for the reporting of the evaluative information to specific populations. These include reports from the state education agency to the governor and the legislature, to the local school districts, and to the public. Local agencies may be required to submit reports to the state education agency, district patrons, staff members, the local accountability committee, and the local board of education.

From the foregoing discussion, it is clear that great variety may exist in terms of the implementation of a bilingual education program. Further, evaluation needs may also vary in terms of required needs assessment, student assessment, program evaluation, and reporting. Considerations of a more technical nature are discussed in the next section of this article.

Literature Review[4]

As previously mentioned, one source of information used by CSE to identify the needs of bilingual program evaluation was a literature review to determine "state of the art." Among the issues examined in this review were (1) *variables affecting program intentions* (e.g., type of program and linguistic classifications of students); (2) *variables affecting bilingualism* (e.g., social variables, attitudes, language acquisition, and language proficiency); and (3) issues of *testing and evaluation design.* Space does not permit all the results of the literature review to be reported in this article. Instead, we will focus on those issues from category 3 relevant to *evaluation* needs in testing and design. (Again, we are making the distinction between evaluation and research previously established.)

There are many obstacles to the acquisition of valid and reliable data, among them that people called upon to conduct evaluation, though well versed in the general area of evaluation, have tended to be unfamiliar with the particular needs and characteristics of bilingual education, e.g., dual language competence and appropriate teaching strategies (Alkin, et al., 1974).

Evaluations of bilingual programs have frequently provided little more than vague descriptions of the nature and content of the programs, and such information has been of limited use to decision makers. Few evaluations have attempted to assess program impact, and those that have tried have been criticized for their failure to consider the issues and problems peculiar to the education of LES and NES students.

Rodriguez-Brown and Cohen (1976) take the position that the bilingual evaluation experience has yielded few meaningful insights into program design and impact because:

1. It is hard, if not impossible, to obtain meaningful evaluation results from pilot programs constantly undergoing modification, presumably for the better. Even if summative results are obtained, the evaluator is hard put to give a label to a particular treatment, since it is in such a state of flux.
2. There has been such a pressing need for evaluation of project-oriented goals, specifically behavioral objectives contained in the curriculum, that no time has remained for evaluating other phenomena.
3. Until recently there have not been adequate assessment instruments, and even now much test development is still required.
4. Political threats to bilingual schooling have forced evaluation reports to be public relations documents.

The diversities among bilingual programs are great, and the extent to which these differences are related to differential development across projects is still open to question. There is a great need to reach agreement on some basic assumptions as to what constitutes a minimum bilingual program, and the kinds of achievement gains and other outcomes that might be expected. The practice of attempting to measure the effects of bilingual education without first determining whether, in fact, a bilingual program actually exists and precisely what it is attempting to accomplish makes it difficult to establish valid criteria for determining success or failure.

Even assuming the development of valid criteria, evaluators must still explore the relationships among instructional strategies, implementation techniques, and program outcomes. This kind of information has been requested in every major effort to evaluate bilingual programs. However, previous efforts have not successfully established these relationships, and little information exists in the literature which would provide guidance to those who would undertake the task.

Testing Problems

Lack of adequate instruments for the assessment of students of limited-English-speaking ability still presents a problem to evaluators. Much has been said about the inadequacy of standardized tests for the assessment of culturally and linguistically different students. These limitations are magnified when norms are used, since LES students are generally not represented in the field-testing and norming sample. Moreover, even when adequate field testing has been con-

[4]We are indebted to Bonnie Sisson and Beverly Cabello of CSE, and to Philip Garcia, formerly with CSE and now at the Institute for Social Research at the University of Michigan, who conducted much of the original work for this review.

ducted among LES/NES students, the possible linguistic and cultural biases of many standardized instruments contribute to their questionable validity and reliability. The problems are particularly acute with respect to English language measures, but are often equally pervasive in instruments that are simply translations from English language versions.

There is a serious lack of technically sound instruments which are culturally and programmatically appropriate for limited-English speakers. Test scores obtained on instruments currently in use can vary considerably based on the congruency between the curriculum and test content.

An alternative to the use of standardized tests is the use of criterion-referenced tests. These tests may potentially provide a more accurate indication of the extent to which students have mastered the objectives of their instructional program. They may be particularly useful for diagnostic and prescriptive information at the local level. But criterion-referenced tests also have limitations. Sparse technical information is available on these tests, and the appropriateness of using them across projects may be questionable. Further, because of the varying levels of difficulty of items and objectives, it is difficult to compare an achievement score from one test to another. Thus, the interpretability of the measures beyond the local level and their generalizability to a wide range of bilingual programs may be limited.

Design Problems

Program evaluations are generally conducted to provide empirical evidence of a program's success. This implies an acknowledged standard, whether it be a comparison group, established norms, or individual pupil histories. As was previously mentioned, the fundamental policy question concerning bilingual education has been to determine whether the scholastic achievement of students in bilingual programs is equal to or better than it would have been had they remained in a regular, unilingual program of instruction.

Two factors greatly hinder the generation of reliable findings: (1) bilingual programs address the difficult and long-standing problem of providing adequate education for a broad range of non-English-speaking students; and (2) methodological problems of participant selection are likely to bias the results in the direction of non-productivity (Campbell & Boruch, 1975). To combat the artifacts which lead to a distorted view of general program effects, Horst, Tallmadge, and Wood (1974), relying heavily on Campbell and Stanley (1966), have proposed five statistical models based on comparison group equivalence. These are:

1. Posttest comparison with matched groups
2. Covariance analysis
3. Special regression analysis
4. General regression model
5. Norm-referenced analysis

Model 1, the posttest comparison with matched groups, is frequently cited as the preferred analytical design. Students are first paired in terms of pretest measures, and one member of each pair is randomly assigned to the treatment group and the other to the control; the two groups thus differ initially only through the operation of chance factors which are assumed to behave according to well-established laws of probability. Differences between the two groups that emerge after the program is administered are therefore attributable either to chance factors in randomization or the cumulative effectiveness of the program. If the first can be ruled out by statistical inference, then the treatment effect remains as the most plausible explanation of the differences.

When matching is unfeasible, *Model 2*, analysis of covariance, may be appropriate. Again, students are randomly assigned to a treatment group, and parallelism of regression lines between the treatment group and the control group is assumed. Initial differences (as measured by a pretest after group assignment) are then adjusted, and the resulting differences between posttest scores of the two groups are assumed to be causally related to the treatment.

While randomized controlled designs provide data that meet the requirements for many tests of statistical inference, the use of experimental designs is limited in bilingual education. Bilingual programs often cannot be studied in a purely experimental fashion, because legislation may prohibit the withholding of bilingual services from students who are defined by law as being entitled to such services. Even when legal restrictions concerning who must receive bilingual instruction are not in operation, similar participant criteria are frequently established by program administrators. Generally, students selected for inclusion in bilingual education programs are those identified as having the most need. And administrators contend that *all* the "neediest" students must receive special instruction. Hence, because of both legal and ethical considerations, students who might benefit from bilingual services cannot be randomly assigned to a non-treatment group for comparative purposes.

Further, for randomized, controlled designs it is critical that the differences in the schooling experience be only that of the treatment. The treatment must be carefully defined and uniformly administered. This is a difficult task for bilingual programs since many employ multiple compensatory efforts with much student overlap, and the students require differentiated instruction because of varying levels of language competence.

For these reasons, evaluations frequently use designs that depart from the format of a randomized controlled experiment. The alternatives usually involve substituting a control group constructed in a nonrandom manner, or controlling statistically for competing explanations by way of multivariate analysis. The special regression techniques are examples of the former alternative, and the general regression model the latter.

Model 3, special regression analysis (either projection or discontinuity) takes advantage of the situation where there is a precise cutoff point for selecting students who are eligible for the bilingual program. Each pupil is ranked according to need (on the basis of pretest scores) for the program, then a cutoff point is determined which separates program from non-program students. The scoring trends (pretest to post-test) of the experimental and non-experimental group are then compared through extrapolation.

When evaluations of programs are requested *after* they have been implemented, there is little hope that the program plan included development of a comparison group. In this situation *Model 4*, the general regression model, may be a feasible approach. Here competing factors (e.g., SES, race, cognitive ability, etc.) are held constant in the attempt to generate an estimate of the net treatment effect on scholastic attainment. As is the case for all non-random procedures, the regression model cannot correct for critical prior differences between the experimental and the comparison groups which have not been identified in the data collection effort.

The norm-referenced model, *Model 5*, may be used when a cohort comparison group is not possible. Project students are compared to a norm group usually comprised of nationally representative students at the same grade level. The no treatment expectation is that the project students will maintain, at posttesting, the same achievement status with respect to the norm group that they had at pretesting. If

their posttest status is higher or lower, positive or negative treatment effects are inferred. The validity of this model rests on the assumption that the achievement status of a particular subgroup remains constant relative to the group norm over the pre- to posttest time span if no treatment is provided.

As Horst and associates have stated, there is little support for this assumption. The information that does exist suggests that differential growth rates are present across test instruments, and that within tests, extreme percentile groups on pretest scores distribute themselves on the posttest in a more severe non-constant manner than middle range percentile groups (Linn, 1978). The latter situation is extremely relevant to bilingual evaluation in that project students are frequently representative of the lowest percentiles of any normed assessment instrument. Thus, since bilingual students are not like the norm group, the underlying assumption of the norm-referenced model is not enhanced.

From the preceding discussion, it is clear that further work needs to be done with respect to the selection and/or development of measures appropriate to a variety of bilingual evaluation needs. Further, use of a true experimental design is usually not possible in a bilingual program evaluation, and each of the non-experimental comparisons discussed are confounded in different ways. The continuing importance of these issues of measures and designs are also evident in the survey of evaluation training needs, as seen in the following section.

Survey of Evaluation Training Needs[5]

The CSE survey was administered at the First Annual National Bilingual Education Management Institute in October 1977. The Institute was sponsored by the Office of Bilingual Education in the U.S. Office of Education and included representatives from the Title VII network across the country. The survey instrument was distributed to participants at the Institute. In addition to questions on participant background, the measure contained three kinds of items: a set of evaluation features or topics which the respondents rated on a variety of dimensions; several questions for which the respondents could select as many of the response options as were applicable; and a few open-ended questions which allowed the respondents to raise issues which may not have been addressed elsewhere in the form. Ninety-nine forms were completed; these comprised the sample on which the identification of needs was based. The purpose of the survey was to discover the *major* needs for evaluation training in bilingual programs, not to make *precise parameter estimates* of them. We believe that we have been able to determine the broad training needs because of the key positions occupied by the respondents as well as their geographic dispersion.

We calculated frequency counts and percentages for the full sample and for a subsample consisting of respondents associated with local educational agencies (LEAs). Because there were very few differences in response patterns between the full sample and the LEA sample, the statements we make here apply to both groups, except where otherwise noted.

The respondents consisted predominantly of representatives from LEAs around the country and were most likely to be directors or administrators of bilingual projects. Although the respondents represented 26 states, nearly one-third were from California. Most worked in projects supported solely by Title VII funds, the remainder in projects with several funding sources including Title VII. There was considerable range in years of bilingual education experience, with one respondent indicating involvement in the field for more than 20 years. Most of the sample had considerably less experience; the median was about five years in bilingual education. Many respondents had been in their present positions for considerably less time, with nearly half of the full sample in their jobs for one year or less. The LEA sample showed only slightly more job tenure.

Of the respondents in the LEA sample, about half were associated with bilingual projects in their second or third year of operation. The projects were more likely to be maintenance than transitional, but a few combined both approaches. About half of the LEA sample was associated with projects covering some or all of the elementary grades. One-sixth spanned kindergarten through eighth grade, and one-fourth covered the high school grades (9-12). Although a few of the respondents indicated that their projects served more than 1,000 students, most projects were considerably smaller, the mode having 51 to 499 students. Seventeen language groups were served by respondents in the LEA sample; Spanish was the most frequently cited.

In order to identify areas of need and interest for evaluation training, respondents were asked to rate a list of evaluation topics according to (1) the *importance* of the topics to the respondents' position and (2) their *interest* in attending a workshop on the topic. The topics receiving the highest percentage of "essential" ratings were:

- program planning — needs assessment, goal setting, stating objectives
- utilization of evaluation results
- development of an evaluation design
- overview of evaluation — how it relates to the educational program
- evaluation of project management

The topics considered least "essential" were:

- the role of the internal or external evaluator in the project
- reporting of evaluation results to various audiences
- selection of project evaluators — qualifications

Respondents indicated a high level of interest in workshops on nearly all of the topics listed. In general, interest in a workshop on a given topic was closely related to the extent to which the topic was considered "essential" to one's job. Respondents reported the highest level of interest in the following topics:

- development of an evaluation design
- utilization of evaluation results
- evaluation of project management
- assessment of the affective domain
- selection of evaluation materials — instruments

The remainder of the survey focused on the manner in which project evaluations are carried out and how the results are used. Respondents considered a list of evaluation features and were asked to indicate those required under the terms of their project contract and to rate how effectively their project had satisfied each requirement. The following features were checked by most of the respondents as being required:

- measurement of oral language proficiency and/or dominance in English

[5]This survey draws upon a CSE report: "Identification of Needs for Bilingual Evaluation Technical Assistance" compiled by Kathleen Fernandes.

- measurement of achievement in reading or language arts in English
- descriptive information about the content and substance of the project
- measurement of oral language proficiency and/or dominance in a language other than English
- assessment of staff in-service and training components
- descriptive information on program implementation
- measurement of achievement in reading or language arts in a language other than English
- measurement of community involvement in the project
- descriptive statistics about the extent of program participation

At least half of the respondents rated their methods of satisfying these requirements as either moderately or extremely effective for eight of the nine areas. The exception was measuring reading achievement in the primary language, where only one-third of the sample felt their methods had the same level of effectiveness. Nearly all of the respondents were doing something to satisfy these nine requirements; only 5 to 10 percent indicated that they were still exploring methods.

Respondents were asked to check any of seven general evaluation tasks which caused difficulties for their projects and to describe the reasons for the difficulties. The task most frequently cited was planning the evaluation. The most frequently cited problem in planning was locating valid test instruments. Other problems related to planning were setting goals, finding trained people (including an evaluator to carry out this task), and developing an evaluation design.

The final set of questions asked respondents about the usefulness of the most recent project evaluation for making changes in the project. The questions were answered only by those people who reported having knowledge of the most recent evaluation. About three-fourths of the "knowledgeable" subsample indicated that the evaluation had been used in making project decisions. These decisions covered a variety of areas including:

- improvements in curriculum, such as new materials and equipment, changes in reading and math instruction, and an increased multicultural emphasis.
- increases in teaching staff, including the addition of more bilingual teachers, improved communication among staff, and reassessment of staff training needs.
- changes in the evaluation design, selection of better tests, and improved data collection procedures.
- improvements in procedures for assigning students and addition of classes to serve more students.
- an increased commitment to bilingual education among district administrators, including changes in priorities and increases in budget.

When asked what aspects of the evaluation contributed to its usefulness, respondents most frequently cited the type of analysis done and the manner of reporting results. Other aspects considered important were the qualifications and role of the evaluator, the comprehensiveness of the evaluation, and the participation of the staff. Approximately one-fifth of the "knowledgeable" subsample indicated that the evaluation was *not* useful for decision making. The reasons for lack of use cited by the respondents reflected the quality of data analysis, failure of decision makers to use the results, the content of the evaluation, and the manner of presenting results.

The respondents were also asked for their recommendations for improving the evaluations of bilingual projects. The most frequent recommendation was for increased availability of valid and reliable test instruments. About two-thirds of the sample felt that technical assistance, primarily in the form of workshops, would improve project evaluations. The respondents indicated that project administrators had the greatest need for a workshop but that such assistance should also be provided for the teaching staff and for evaluators. Other forms of technical assistance mentioned by at least half of the respondents were consultants to participate in the development of an evaluation system and guidance materials and manuals for evaluation. A third area of recommendation covered topics outside the direct control of the project and included more specific evaluation requirements and more streamlined reporting systems.

In conclusion, the survey identified a number of evaluation topics where there is a need for personnel or for technical assistance training. These topics are:

- evaluation planning and management
- test selection and development
- development of evaluation designs
- utilization of results

These findings are clearly related to the major findings of our literature review, i.e., principal needs in testing and design. Further, field concerns with management and utilization of results, also in the literature review, seem to reflect the diversity of program components and reporting strategies existing in bilingual legislation and regulations. These kinds of problems and needs have influenced the position taken by UCLA's Graduate School of Education and by CSE in terms of solution strategies. These strategies consist primarily of developing personnel who are competent in evaluation and bilingual education, and conducting research and development activities in bilingual education.

Responses to Evaluation Needs in Bilingual Education: The UCLA Graduate School of Education/CSE

One of the areas of study in UCLA's Graduate School of Education, Administrative Studies in Education, offers a field of specialization in Curriculum and the Study of Schooling. In response to concern for the special learning needs of culturally and linguistically diverse student populations and for qualified specialists to work with these students and the programs designed for them, the specialization now offers a doctoral program in Bilingual/Multicultural Education.[6] The new emphasis is designed to prepare educational leaders for teaching and research positions in colleges and universities, careers in educational research and development, and for placement in agencies concerned with policy formulation in elementary and secondary schooling.

The Bilingual/Multicultural program emphasizes the development of competencies for investigating the social context, curriculum, and evaluation of schooling. Doctoral students in the program explore factors influencing or constraining the development of new educational programs and practices in such fields as language, reading, and the social studies. Alternative teaching models, change strategies, and models for the organization and reconstruction of schooling are also investigated.

[6]Those interested in the program on Bilingual/Multicultural Education should write to Dr. M. Beatriz Arias or Dr. Concepcion Valadez in the Graduate School of Education.

In addition to formal course work, the program includes research internships; students can become active participants in on-going research projects under the direction of a faculty member. Depending on the special interests of the student, there are several possible research opportunities at various departments on campus (for example, at CSE) in which the students can gain practical experience in their field. The major goal of the program is to develop specialists in bilingual/multicultural education. These specialists will be trained in the conduct and application of research and evaluation in the improvement of practice in bilingual education.

CSE is examining the evaluation training needs of bilingual education programs. Materials being developed in this area of activity have been influenced by federal and state legislative requirements, literature on "state of the art," and the needs survey discussed earlier in this article. While CSE cannot address all of the current needs in bilingual education, we are attempting to provide materials in the four principal areas of need identified previously — evaluation planning and management, test selection/development, evaluation design, and utilization of results.

Thus far we have discussed evaluation needs in bilingual education from the standpoint of legislative and regulatory requirements, technical and methodological issues as identified in the literature review, and personnel training priorities gathered from bilingual program administrators.

Review of the legislation shows that a great deal of variety may exist in the development, implementation, and evaluation of a bilingual education program. The literature review indicates that previous work has done little to provide a referent from which to evaluate the educational gains derived from participation in a program of bilingual instruction. This may be explained in part by possible evaluator unfamiliarity with the unique problems of bilingual education, as well as by failure to explore the relationships among instructional strategies, implementation techniques, and program outcomes. Understanding these relations will require greater evaluator attention to delineation of program goals and attainment strategies, as well as consideration of program outcomes in addition to those of a purely cognitive nature. Reporting these relationships in a useful manner will require greater evaluator attention to program description and documentation; greater attention to description and documentation can help provide a referent to interpret program effect.

The literature review also suggests that further work is needed in the selection or development of appropriate assessment instruments and designs. A truly experimental design is usually not feasible, and non-experimental designs can be confounded in various ways.

The survey of bilingual program administrators indicates that the greatest needs for training lie in the areas of evaluation planning and management, utilization of results, test selection/development, and development of evaluation designs.

In the remainder of this article, we will present some broad suggestions to the evaluators of bilingual education programs. These suggestions grow out of two beliefs: (1) that an appropriate place to seek improvements in evaluation capacity is at the level of the local bilingual education program and (2) that such improvement will eventually lead to improvements in school experiences and academic achievement for students in bilingual programs.

Suggestions

Evaluation Planning, Management, and Utilization

The minimum requirements for Title VII basic programs, as amended by the regulations published in the Federal Register, March 29, 1979, include the following:

- the evaluation should assess project progress in achieving its Title VII objectives in all components
- evaluation of pupil achievement should provide for some comparison of performance on reading skills in English and in the non-English language, with an estimate of what performance would have been in the absence of the program. Comparisons may be based on local, regional, or national norms on standardized tests; on historical data; or on achievement scores of a comparison or control group. The limitations of such comparisons must be recognized in data analysis and interpretation.
- instruments to evaluate student performance should be described, as well as the rationale for their selection and procedures for use.
- pre- and posttest results should be reported on all participating students (and comparison students if used) using means, standard deviations, and appropriate tests of statistical significance.

As mentioned previously, the various states with legislation on bilingual education have attempted to meet federal requirements and to serve the needs of the students in their states in a variety of ways. As evaluators of bilingual programs begin to plan, they must therefore consider the various agencies — federal, state, and local — giving direction to the program. The legitimate differences that exist among programs point out the inappropriateness of applying one set of criteria to all bilingual programs.

It is critical that the goals and objectives of a bilingual education program be made explicit in order to permit establishment of valid criteria for determining program success or failure. The goal statements should include outcomes beyond those specifically concerned with student achievement.

Evaluators working in a bilingual setting must become familiar with a variety of program features which are frequently absent in a unilingual setting. They must also build into the evaluation plan a variety of formative tasks. These tasks should include examination of program implementation, using resultant information to suggest areas of program improvement, and careful documentation of the implemented features and their relationships. Evaluators must also attempt to improve their summative evaluation activities, for example estimating the contribution of the implemented features to program outcomes — unanticipated as well as anticipated.

Evaluators of bilingual programs must ensure that the appropriate program features or variables are selected for evaluation. The evaluation itself — design, measures, analyses, and reporting — should be technically sound, acceptable under existing regulations, and sensitive to the needs and constraints of the program under examination.

These aims can be facilitated by: reviewing the operant regulations; examining the program plan or description of the program (if such plan or description exists); determining (in consultation with program participants) which features of the program need to be evaluated; deciding upon the means to evaluate these features; selecting methods to ensure ongoing documentation of their implementation, relationships, and cumulative effects; and considering appropriate means of reporting evaluation information to various audiences.

The kind of evaluation planning reflected above will be more feasible and effective the earlier the evaluator is involved in the program. If at all possible, evaluator involvement should occur before the program is implemented so that the evaluation plan is an integral part of the program's operation. The kind of evaluation planning described here also relies upon the existence of some program plan or description. Such program descriptions may not provide sufficient information to permit adequate evaluation planning without discussions with program staff to elaborate intentions, achievement strategies, means of implementation, and expected outcomes. In short, the kind of evaluation planned will be influenced by the time at which the evaluator enters the program and the existence of observable and measurable program processes and outcomes.

The ease of management of a bilingual program evaluation will depend on the care devoted to the planning. Utilization of information will be enhanced to the extent that information on important program considerations is reported in a timely manner to the appropriate decision makers.

Earlier in this article we mentioned that in both federal and state legislation governing bilingual education considerable attention had been paid to evaluation requirements. These requirements, which may include needs assessment, student assessment, program evaluation, and reporting, provide a useful source of information for the planning and management of the program's evaluation. As with other aspects of the legislation affecting bilingual education, each of the four categories of information above may vary from state to state, but depending upon the time at which the evaluator enters the program, they can either provide information that the evaluator can use to inform his/her evaluation, or suggest features which must be included in that evaluation.

Needs assessment: The conduct of a state or local needs assessment may include requirements for reporting:

- numbers of students in the district eligible for the program, including language and age
- the distribution or concentration of these students by school
- achievement levels of these students
- educational placement of these students, such as in special education classes
- student dropout and retention rates
- demographic information, such as national origin, race, family income level, and mobility rates

Student assessment: Student assessment requirements may include:

- development of criteria for student assessment
- specification of criteria for instrument selection/development
- assessment of language use such as home language, peer interaction, and language use in the classroom
- assessment of oral languages which may include language proficiency, language dominance, listening comprehension, and oral production
- assessment of student achievement, which may include reading and writing ability, course performance, and basic skills
- use of appropriate statistical analyses and reporting procedures for the audience(s) addressed

Program evaluation: Requirements for program evaluation may include:

- program implementation information, e.g., staffing patterns, teaching methodology, etc.
- numbers of students served, including language classification, sex, age, and grade levels
- achievement of the objectives established for the program
- attitudes of people involved in or affected by the program
- program management
- staff development
- community involvement
- materials development, acquisition, and use
- per-pupil costs of the program and other cost information including use of funds
- other programs affecting students at the local level
- availability of technical assistance and other resources

Reporting: Among the audiences for all or parts of an evaluation report may be:

- federal government
- state education agency
- local school board
- school district administration
- project administration
- project staff
- students
- parents of students served
- the local community and the public at large

While addressing required evaluation components, the evaluator must also be attempting to select for examination those features deemed to be important to the particular program and the setting in which it operates. A likely starting point for this decision area lies in investigation of the program to determine what it intends to accomplish via what implementation strategies. These issues were discussed earlier in the article. They are restated here in terms of the issues they suggest that may need to be considered in the evaluation.

Type of program:

- program emphasis: transitional or maintenance
- the stated goals and objectives of the program, those dealing with linguistic and educational outcomes and also those emphasizing non-cognitive outcomes
- student language proficiency in the primary language and in English at the time of entry into the program
- length of time that students may remain in the program; expected time of exit

Population to be served:

- student background information, such as place of birth, cultural background, home language use, native or primary language, language use outside of the classroom
- information on students' language ability and/or dominance, such as proficiency in English and perhaps the non-English language, language dominance, understanding and speaking of English, reading and writing in English, achievement in English, understanding and speaking the non-English language, reading and writing of the non-English language

Participation of English-speaking students:

- the number and proportion of such students in the program
- their acquisition of knowledge and understanding of the culture of the children of limited-English-speaking ability
- their development of knowledge of and proficiency in a second language
- the costs associated with their participation in the program

Census:

- definitions of categories used to determine eligibility
- the unit or level of reporting, such as district, school, grade
- the numbers of students in the designated category by unit of reporting

Description of the program:

- the linguistic goals and objectives of the program and the linguistic abilities of the students for whom they are established
- the use of the non-English language and English in providing instruction in the required courses
- the use of the non-English language and English in elective courses and in such courses as history and culture
- the amount of instruction provided in language arts, comprehension, speaking, reading and/or writing of the non-English language
- the amount of instruction provided in language arts, comprehension, reading and/or writing of English
- instruction in the history and culture associated with the non-English language, and the history and culture of the United States
- the degree to which appreciation for the cultural heritage of the children of limited-English-speaking ability is built into the instructional process and its presence in the curriculum
- participation of students in non-verbal courses, such as art, music, and physical education, and in extracurricular activities
- psychological objectives of the program, such as attitude and self-concept, and the program designed for their accomplishment
- student composition of the classroom by race, national origin, cultural/ethnic group, language ability, etc., and age and level of educational attainment
- grades to be covered and length of time in the program

Student-teacher ratio:

- total number of students enrolled in the class
- total number of adults in the class and their positions, such as teacher or aide

Teacher/staff requirements and qualifications:

- educational level, including degrees
- possession of a regular teaching certificate
- possession of a bilingual teaching certificate or endorsement
- language ability in English and the native language of the students being served by the program (including literacy)
- cultural background
- knowledge of cultural background of the students, including the ability to teach the history and culture of the United States and the native land of the students (or that of their parents)
- knowledge of bilingual methodologies
- ability to develop language skills in English and the language of the students being served by the program
- ability to teach content areas in the language of the students being served by the program, and in English

Staff training:

- the role of the person participating in the training
- the experience and established need of the participants
- the method by which the training is delivered, e.g., in-service training workshop, courses at an institution of higher education, etc.
- the content of the training, in relation to the participant's need
- the expected outcome as a result of participating in the training, e.g., bilingual certificate, improved competencies, etc.
- general effectiveness of the training program

Materials:

- the extent to which materials are available for the language and cultural group being served
- the adequacy of the materials for accomplishing the program's goals and objectives
- the extent to which technical assistance is made available to the program for materials acquisition and development from materials development centers, resource centers, and state departments of education
- the resources available at the local level for materials development
- the extent to which information is available as to the adequacy of the materials
- the use of the materials in the instructional process

Community participation:

- the organization through which the community systematically participates, such as a school advisory committee, district advisory committee, etc.
- the process by which committee members are selected for participation, such as appointed, and by whom, or elected
- the composition of the committee, such as language groups represented, numbers and percentages of parents, other community groups, educators, etc.
- the nature of the involvement of the community in the program, such as program planning, stating of program goals and objectives, advising the program management during the implementation phase, participating in the evaluation of the program, etc.
- the provision of adult education programs, and the participation of parents and other community members in them

The preceding list suggests the *kinds* of issues the evaluation may need to consider; these issues bear upon the methods used to evaluate the program and the kinds of outcomes the program produces. For example, choice of evaluation techniques may depend on whether the program is transitional or maintenance, and specific measures to be used will need to be geared to the linguistic backgrounds of program students. Program outcomes will also be influ-

enced by type of program and students (both LES and English speaking) that it serves. Outcomes may also be influenced by such matters as classroom ratios, teacher qualifications and training, materials used, and community participation.

Deciding which program features are the most important to evaluate is no easy task and will vary from program to program. But the selection of these features and the management and conduct of their evaluation can be facilitated through examination of regulations, program plans and records, previously gathered evaluative and other kinds of information, and discussions with program staff. Evaluative feedback on these features to program staff may enhance the information's utility. Careful documentation and description of how the features were implemented and examination of their interrelations and their cumulative effect on program success will also provide useful information to program staff. Such reporting, also, will be invaluable to others who may use the information reported to develop and implement a successful program of bilingual education.

Testing and Design

Even when the program features to be examined are carefully delineated, the information resulting from the evaluation will be influenced by the quality of the measures used and the conditions in which the information is gathered. Any test to be used should be selected both for its technical properties and for its match with curriculum goals and language of instruction. Given the limitations of norm- and criterion-referenced tests mentioned earlier, the evaluation may need to be broadened to include such measurement techniques as questionnaires and observations. This broader data base, further, may help alleviate some of the design problems previously discussed by providing information on a range of variables that affect student outcomes. For example, information about the initial linguistic abilities of the students (perhaps by class or grade) within a bilingual program may offer other variables that could be controlled or directly examined when evaluating program effect. A broad data base can also be used for purposes of analytic designs and for long-term evaluations of program impact.

References

Alkin, M.C., et *al. Evaluation and Decision Making: The Title VII Experience.* CSE Monograph Series in Evaluation No. 4. Center for the Study of Evaluation, University of California, Los Angeles, CA, 1974.

Campbell, D.T., & Boruch, R.F. Making the Case for Randomized Assignment to Treatment by Considering the Alternatives. *In Evaluation and Experiment,* C.A. Bennett & A.A. Lumsdaine (Eds.). New York: Academic Press, 1966.

Campbell, D.T. & Stanley, J.C. *Experimental and Quasi-Experimental Designs for Research.* Chicago: Rand-McNally, 1966.

Cronbach, L.J. & Suppes, P. (Eds.) *Research for Tomorrow's Schools: Disciplined Inquiry for Education.* New York: Macmillan, 1969.

Horst, D.P., Tallmadge, G.K., & Wood, C.T. A Practical Guide to Measuring Project Impact on Student or Student Achievement. In *Measuring Achievement Gains in Educational Projects.* Prepared for HEW by RMC Research Corp., Los Altos, CA, 1974.

Linn, R. "Evaluation of Title I Via the RMC Models: A Critical Review." Paper presented at the CSE Winter Invitational Conference on Measurement and Methodology, Los Angeles, CA, 1978.

Rodriguez-Brown, F.V., et *al. Longitudinal Design Considerations for the Evaluation of Bilingual Programs.* Paper presented at the Annual Meeting of AERA. Chicago, IL: Bilingual Evaluation Center, 1976.

Desegregation and the Rights of Hispanic Students: The Los Angeles Case

M. Beatriz Arias

Beginning with the landmark 1954 Supreme Court decision in Brown vs. Board of Education of Topeka, which found that separate educational facilities were inherently unequal, the majority of court litigation regarding educational segregation has been on behalf of black plaintiffs. In the original desegregation cases, there were primarily two racial groups confronting each other across rigid racial barriers, with clear and dramatic differences demonstrated in the educational opportunities afforded members of each group. While there has been extensive documentation on the segregation of Blacks, the educational problems of black students, and the economic barriers encountered by black families, documentation regarding the effects of racial isolation on other ethnic groups is noticeably lacking. This is compounded by the fact that in the two decades since the Brown decision, the Supreme Court has not addressed the segregation of other minority groups. Indeed, it was not until desegregation cases began moving northward and westward that the definition of who constituted a segregated minority group even became an issue.

The history of racial discrimination in the United States has deeply affected the experience of all minority groups. California history is rich with evidence of separate schools for Asians, Blacks, and Hispanics. State law permitted, until 1947, the establishment of separate schools for Chinese, American Indian, Japanese, and "Mongolian" students. While Hispanic students were not excluded by statute from white schools in California or in the Southwest generally, the absence of such legislation did not deter school officials from establishing and maintaining "Mexican only" schools.

Given the extensive documentation noting the persistent educational failure of Hispanic students resulting from discriminatory practices, it is surprising that the Supreme Court did not address the problem of school segregation of these children before the 1970s. However, it was not until 1973, when the court decided its first "Northern" desegregation cases, Keyes vs. School District No. 1, Denver, that the court outlined how Hispanic students were to be treated in the context of desegregation. According to Gary Orfield, a noted political scientist working in the area of desegregation, *Keyes* required a Supreme Court definition of the status of Hispanic students. The justices chose to give these students special treatment in the desegregation plan by concluding that they, as a group, had been subjected to a system of pervasive official discrimination. The court decided that Hispanics were constitutionally entitled to recognition as a distinct class:

> ...there is also much evidence that in the Southwest, Hispanos and Negroes have a great many things in common.... Though of different origins, Negroes and Hispanos in Denver suffer identical discrimination in treatment when compared with the treatment afforded Anglo students. In that circumstance, we think petitioners are entitled to have schools with a combined predominance of Negroes and Hispanos included in the category of "segregated schools."

Previous to this action, the issue had produced serious confusion in lower courts, allowing "Texas style" integration plans which permitted local officials to count Hispanics as Whites, thereby achieving so-called "integrated" classes consisting predominantly of Hispanic and Black students.

While the Keyes decision settled the issue of desegregation for Hispanics in the Southwest, it did so in an unsatisfactory way. By concluding that Hispanics were like Blacks and should be accorded the same rights, those characteristics which differentiate the two groups, such as linguistic barriers, remained unaddressed. Further, because of the heterogeneity of the Hispanic population, it remains unclear whether all Hispanic children fulfill the requirements for being defined as a segregated minority. This article focuses on the linguistic and cultural issues pertinent to the education of Hispanic students within the context of the Los Angeles desegregation case.

A Brief History of the Los Angeles Desegregation Litigation

The case of Crawford vs. Board of Education of the City of Los Angeles was originally filed in August of 1963. The trial began in October of 1968, and the conclusions were reached by May 1970. At that time, Judge Gitelson of the Los Angeles Superior Court found that the Los Angeles Unified School District (LAUSD) was substantially segregated. Three out of every five schools in the district were segregated (defined as any school where pupil enrollment was more than 49% minority or substantially over 50% White). The statistics provided to the Gitelson court revealed that in 1968 a substantial proportion of the district's schools had student populations of either 90% or more minority students, or 90% or more white students.

The Gitelson court also found (1) that the School Board had not taken steps to design a program to alleviate the segregated condition of the district's schools; (2) that it had knowingly and in bad faith segregated its students through district assignment policy and feeder patterns; (3) that school facilities and curriculum were of poorer quality in the minority segregated schools than at the predominantly white schools; and (4) that minority students suffer significant harm when their education takes place in a segregated setting.

In 1976, after a series of appeals, the California Supreme Court affirmed the lower court's findings, stipulating, however, that specific racial percentages for each school were not required by the state constitution. The Supreme Court maintained that the constitutional imperative was twofold: (1) to eliminate segregation, and (2) to eliminate the harms inflicted by the segregation. For neither issue, however, was it necessary for each school to reflect the racial and ethnic percentage of the district. Moreover, the goal to be achieved was to eliminate the harms to minority children which had originated from the maintenance of segregated schools.

It is very interesting to review the racial and ethnic population of the district in 1968 as compared with 1978.

Racial and Ethnic Student Population of LAUSD

	1968		1978	
	Percentage	# of students	Percentage	# of students
Mexican-American	20.0%	129,591	38.5%	214,034
Blacks	22.6%	146,686	24.7%	137,363
Asians	3.6%	23,141	6.4%	35,610
American Indian	.2%	1,192	.6%	3,387
White	53.6%	347,967	29.8%	165,361
Total		648,577		555,755

These figures show that while the LAUSD was predominately white in 1968, ten years later the district has a significantly different complexion with a population in which minority students constitute the majority; in fact, there is a 70% combined minority population. Whereas in 1968 desegregation in the Los Angeles context may have appeared to be a black and white issue, presently Hispanic students comprise the largest single ethnic/racial group.

The trends demonstrated in the above figures continue; currently, at the kindergarten and first grade levels 50% of the student population is Hispanic. Indeed, Orfield (1978) projects that within a generation Hispanic students will make up a majority of the entire system, perhaps a large majority.

Given these statistics, what is known about the Hispanic student population? What are the particular needs of these students? In what ways are their needs similar or different from those of other minority populations? In what ways are they in need of desegregative remedies? Do these remedies apply equally across the board? What are the benefits to Hispanic students from participating in a desegregation plan?

As Carlos Haro (1977) has pointed out, the desegregation of the LAUSD will improve the quality of schooling for the Hispanic student only to the degree that the institution restructures itself to meet the needs of Hispanic youth. In order to meet those needs, they must first be identified. The following sections will examine the particular linguistic and cultural needs of Hispanic students.

Linguistic Needs

The Los Angeles Unified School District has the largest population of limited-English speaking and non-English speaking (LES/NES) students in the nation. The major language groups in Los Angeles include Cantonese, Portuguese, Spanish, Filipino, French, Italian, German, Japanese, Russian, Korean, Samoan, Vietnamese, and several Native American languages. By far the largest proportion of LES/NES students identify Spanish as their native (mother) tongue. Of the 200,000 Hispanic students in the city, a very substantial number (almost half, depending upon the mode of assessment) are either non-English speaking (NES) or limited-English speaking (LES). The maintenance of special educational programs to meet the needs of this student population is mandated by the Supreme Court and the State of California. The Lau vs. Nichols 1974 Supreme Court decision, as well as California's Bilingual Education Act, AB 1329 (Chacon-Moscone), mandate special education services for students identified as limited- or non-English speakers:

> *Each limited-English speaking pupil enrolled in the California Public School System in grades K-12 shall receive instruction in a language understandable to the pupil which recognizes the pupil's primary language, and teaches the pupil English.*
> (AB 1329, Chapter 576, Section 5767.4)

Thus, every pupil who has been identified as LES/NES through a series of state and district approved assessment measures is entitled to some type of bilingual instructional program effort.

It is essential to carefully scrutinize the implication of student reassignment and its impact upon these programs as a result of the Los Angeles desegregation plan. Many claim that the mandate to desegregate will present formidable obstacles to organizing bilingual programs that are educationally viable. For example, the LAUSD's Lau plan offers guidelines as to classroom composition; no more than

2/3 of the classroom can be composed of students identified as LES/NES, or exceed the ratio of LES/NES students in the school population by 10%. The question is, can these classroom proportions be achieved in integrated settings, or are segregated settings necessary?

Another concern regarding language minority students is whether those children participating in a bilingual program (or an English as a Second Language Program) will be adversely affected by the temporary reassignment (semester or grade exchanges) required by the desegregation plan. Many bilingual education programs presently operate in settings in which both language minority and racial/ethnic minority students are often the numerical majority (a segregative setting by the district's current 70/30 standards). Because research has not been conducted to assess the impact of mixing large percentages of LES/NES minority students with fluent English speaking majority students in bilingual programs, it is uncertain at this time whether such an effort would have detrimental or beneficial consequences socially or educationally.

Bilingual Education and Desegregation

The basic problem with the LAUSD desegregation plan and the reassignment of students is how to provide the bilingual services to which the identified LES/NES population is legally entitled in the midst of extensive student reassignment. The first phase of the LAUSD desegregation plan includes the reassignment of students in grades 4-8 to paired and clustered schools or midsite locations. Of the 148 elementary schools participating in mandatory reassignment, 96 have identified significant numbers of LES/NES students; of the 19 junior high schools participating, 17 have identified LES/NES students. While it is difficult to ascertain exactly how many LES/NES students were affected by the plan in the 1978-79 school year, if the current desegregation plan is expanded to include all 4-8 graders, approximately 27,000 LES/NES students would be involved in reassignment.

There are four possible conflicts between the development of a desegregation plan and the provision of a bilingual education program:

(1) Maintenance of a "critical mass" of LES/NES students for purposes of instruction;
(2) Availability of bilingual teachers throughout the district who can provide services for LES/NES students;
(3) Coordination of curricular planning between sending and receiving school; and
(4) Willingness of Anglos to integrate bilingual classes.

Each of these issues raises questions in the development of a desegregation plan which must be addressed in those communities where there are significant numbers of linguistic minority students. These issues, however, are not insurmountable. Efficient and thoughtful planning can ameliorate situations which would place linguistic minority students in settings which they find literally incomprehensible.

The first year of the LAUSD desegregation plan had two mandatory components: (1) student exchanges between pairs and/or clusters of schools matched on the basis of pupil ethnic enrollment, and (2) assignment of students to midsite schools. Only grades 4-8 in selected schools were to be involved in the mandatory reassignment. Local school officials, along with parental groups, were given considerable discretion in designing the manner in which the reassignment would be implemented. The most popular reassignment strategy for clustered schools was a "grade exchange program." For example, in this program students from all the fourth grades of the three clustered schools would be assigned to one school site for one year. The following year as fifth graders they would be assigned another school site. By the sixth grade they would have been in all three different school sites, with mandatory travel required for two of the three years. The reassignment strategy for paired schools included both grade exchanges and semester exchanges. In a semester exchange, half of the students identified for reassignment would travel to the receiving school for one semester, returning to the home school for the second semester when the other half of the students travel to the receiving school. Midsite assignments were made in a last minute effort to reduce the travel time of students enrolled in schools where travel time would exceed the 90-minute criterion. Midsites involved primarily junior high schools, grades 7 and 8.

The following sections will review the four areas of possible conflict between the LAUSD desegregation plan and the provision of bilingual education programs.

Critical Mass

One important component necessary for the implementation of a viable instructional program for LES/NES students is establishing and maintaining a critical mass of LES/NES students. What is a critical mass? Some educators suggest a minimum of 20 LES/NES students per grade in a school. It is easier to conduct a classroom with at least 2/3 LES/NES, and it is necessary to provide LES/NES students with English language models. For organizational purposes and for instructional purposes the notion of a critical mass of students helps to structure the implementation of bilingual instructional approaches. Consequently, in identifying students for reassignment, the first recommendation is that students be selected on the basis of their instructional needs. That is, instead of randomly selecting students for reassignment based on birth date or alphabetical order (as was initially done in Los Angeles), consideration must be given to whether the student has been identified as LES/NES. Following this, it is then possible to insure that at least 20 LES/NES students are present at each grade level in the receiving or sending school. It is essential to avoid a situation where the critical mass existing at a particular school is disrupted because of desegregation efforts.

Availability of Teachers

The availability of bilingual teaching staff at the receiving school is another important concern. As of Spring 1978, none of the receiving schools in pairs or clusters and in semester or grade exchange programs had bilingually certified teaching staff prior to student reassignment.

The conflict which arises when students from linguistically diverse populations are mixed in a school or classroom setting can be ameliorated by a series of instructional approaches, including individualized instruction and combinations of heterogeneous and homogeneous grouping strategies. Teachers who have been trained to teach bilingually have been exposed to methodologies which enable them to organize the bilingual classroom and their instructional approaches to maximize the benefits of the linguistic diversity of the classroom. For these teachers, few problems would be encountered in instructing integrated bilingual classes. However, there is a critical shortage of trained bilingual teaching personnel throughout the district and state. With the LES/NES student population in Los Angeles swelling to approximately 250,000 students at the K-12 grades for the 1978-79 academic year, the Commission for Teacher Preparation and Licensing has estimated a total statewide need of from 10,000 to 13,000 bilingual certified teachers. Currently, the Commission estimates that approximately 3,000 bilingual certified teachers are employed in California.

AB 1329 requires that all teachers in bilingual classrooms established pursuant to state law be certificated bilingual/cross-cultural teachers. However, in recognition of the shortage of bilingual teachers, the law also authorizes the State Superintendent of Public Instruction to grant waivers to districts for a teacher who is *not* so qualified, but who is participating in a program leading to a certificate of competence in bilingual/cross-cultural education. As the largest district in the state with the largest concentration of LES/NES students in the nation, the need of the LAUSD with regard to bilingual teachers is intense. District requests for waivers this year alone numbered over 1,800 for teachers who were teaching in a bilingual program of instruction yet who were not fully certified. In order to obtain waivers, these teachers must be enrolled in a program leading to a certificate of competence. This waiver program terminates as of September 1980.

In addition to the 1,800 teachers on waivers working in the district, the Personnel Division conservatively estimates a bilingual teacher need of 300 at the elementary level and 450 at the secondary level. According to the figure reported in the School Plan for Consolidated Programs, the concentration of bilingual certificated staff is at the K-3 grades. Consequently, although there are large numbers of LES/NES students to be served in grades 4-8, the majority of certified bilingual staff is assigned to the earlier grades, especially in the categorically funded bilingual programs. Thus, those paired and clustered schools which have a large proportion of LES/NES students already have identified a teacher shortage. With the promised reduction of teacher/pupil ratio to 27/1, this shortage will be intensified.

The question arises as to how the needs of LES/NES students can be met while participating in student reassignments in view of the critical bilingual teacher shortage. As Orfield has noted in his court report:

> *The loss of bilingual teachers and the drastic general reduction of Hispanic and Asian staff would seriously damage the desegregation plan. The plan will bring many non-English speaking children and parents out of a segregated environment into one where there will often be little initial understanding of their language and traditions.... Staff that can speak the native language of all of the children and their parents can play an absolutely crucial role in mediating the transition for both children and parents and in explaining one group to the other. They also provide important models of bilingual success for both groups of children in the integrated classrooms.*

Given the importance of the role of bilingual teaching staff to the successful implementation of the desegregation plan, the following policy guidelines should be observed:

(1) Bilingual teachers should be transferred in proportion to the numbers of LES/NES students participating in reassignment in a pair, cluster, or midsite. These transfers should be made involuntarily when there is a lack of volunteers.

(2) Pairs and clusters should be planned so that receiving schools do not have only one "isolated" bilingual teacher. At least two teachers, or one teacher and one paraprofessional, should be assigned to the receiving school so that they can reinforce each other's efforts.

(3) Wherever LES/NES students are transferred, the district should plan and implement a program of inservice for administrators and teachers at the receiving school to inform them of the characteristics and needs of the LES/NES student population.

Curricular Planning and Coordination

While the pairing and clustering approach to desegregation implementation has allowed for significant parental community involvement in educational planning, it has yet to be tested as an effective remedy that does not impinge on students' educational achievement due to a potential lack of curricular continuity. That is, we do not know the effect (if any) on students of participating in a curricular program at School A for one semester (or one year) and then subsequently in a different curricular program at School B for a second semester (or year). This issue of participation in a sequential, cohesive curricular program becomes particularly salient for those students who have participated in special curricular efforts, such as bilingual instruction or English as a Second Language programs.

Given the lack of personnel resources noted earlier, it is extremely doubtful that students participating in the paired schools on a semester exchange would have the benefit of sequential language programs, coordinated such that the same materials available at the sending schools are employed at the receiving school. One way to ameliorate this situation would be for the instructional staff to accompany the reassigned students for their second semester. But more importantly, attention should be given to the development of a viable bilingual or English as a Second Language instructional strand in the receiving schools.

A policy recommendation in regard to curricular continuity would be for the schools involved in pairs and clusters to assess their support services for LES/NES students and to phase in bilingual staff, curricula, materials, and support services by grade level in proportion to the number of students participating. Unless such support systems are available, the involvement of LES/NES students in semester exchange programs should be discontinued.

Anglo Participation in Bilingual Programs

Since the *Crawford* decision does not require racial balancing, it would be possible to maintain the critical mass of LES/NES students in an integrated classroom with the remainder of the students comprised of other white students. However, the district has failed to attract English speaking children into bilingual programs. The reason for this is that bilingual education has been characterized as a compensatory education program, and Anglo parents have been reluctant to enroll their children in such a program. However, at a time when more than half the children now born in Los Angeles and a large proportion of the children throughout Southern California are Hispanic, it is important that school officials emphasize to English speaking parents the value of bilingual skills in the future society and economy of California. Bilingual education programs offer a unique opportunity for English speaking students to interact with native speakers of Spanish and learn a second language at an early age. Additionally, native English speakers provide valuable language models for the LES/NES students. Bilingual magnet centers could provide such curricular programs with the goal of maintaining an interracial enrollment.

Summary

The multilingual environment is one of the unique features of the LAUSD. Nowhere in the U.S., with the exception of parts of Texas, Miami, and New York, is there so clear a use for a second language as in Southern California. There are millions of native Spanish speakers and every expectation that the numbers will continue to grow both by natural increase and immigration; at the same time the Anglo population is decreasing due to low birth rate. The next generation will be significantly different from the present adult

population, especially with regard to linguistic ability. Spanish will probably be an important advantage for employment in the future of Southern California.

Further, the possible expansion of the desegregation plan to include more schools and more grade levels will provide an excellent opportunity for good Spanish instruction. Bilingual education may work more efficiently for Spanish speaking students when English speakers are part of the program, as it will also benefit those students who wish to learn Spanish as a second language. Orfield has noted in his court report:

> *While I believe that it is extraordinarily important that Chicano children learn English early in their school careers, I think that it would be a serious mistake to overlook the great usefulness for Anglo children also of developing a bilingual capacity. Although few Anglos in Southern California appear to be aware of the fact, they will soon be a minority in much of the region. Eventually, the changing numbers will create changing political and economic realities. Anglos as well as Mexican-Americans have much to gain from integrated bilingual education programs.*

As is clear from the evidence presented here, the Los Angeles desegregation case has unique features distinguishing it from other desegregation efforts in that the predominately tri-ethnic make-up of the student population will allow for desegregative remedies which include linguistic and cultural programs. The recommendations presented have addressed the issue of the interface between bilingual education and desegregation planning. The existing multilinguistic and multicultural features of the student population are assets to be utilized in the development of programs for extending equal educational opportunity to all segments of the population.

References

Arias, M.B. A Report to the Honorable Judge Paul Egly: The Desegregation Plan's Impact on Services to Limited- and Non-English Speaking Students and Hispanic Students. Expert Report, November 1978, Los Angeles, California.

Haro, C. Mexican/Chicano concerns and school desegregation in Los Angeles. Monograph No. 9, Chicano Studies Center Publications, UCLA, 1977.

Orfield, G. *Must we bus? Separate schools and national policy.* Washington, D.C.: The Brookings Institution, 1978.

Orfield, G. A Report to the Superior Court of the State of California for the County of Los Angeles: Desegregation Principles for Los Angeles. Expert Report, November, 1978, Los Angeles, California.

Weinberg, M. *Minority students: A research appraisal.* U.S. H.E.W., National Institute of Education, March 1977.

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This book will be published by Teachers College Press, New York, in 1980.

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